

Several New Genera and Species of Discocephaline Pentatomids (Heteroptera: Pentatomidae)

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Abstract: Describes six new genera and nine new species of discocephaline pentatomids as follows: **Placidocoris bivitattus** (Argentina), **Tetragonotum megacephalum** (Brazil), **Pandonotum punctiventris** (Brazil), **Uncinala tau** (Brazil), **Grassator sinuatus** (Costa Rica), **Grassator reticulatus** (Costa Rica), **Patronatus binotatus** (Panama), **Patronatus punctissimus** (British Guiana), **Patronatus flavicrus** (Venezuela). Gives phyletic relationships of genera.

During the past several years, either by personal field collecting, or by loan from various museums, or by gratuitous donation, I have been able to bring together a large collection of discocephaline pentatomids. Among these are several specimens which do not belong to any known genus or species. It is now necessary to describe these before a tribal analysis of the whole subfamily may be made. Six new genera are being erected.

Placidocoris new genus

Fig. 1

Type species: *Placidocoris bivitattus* new species

DIAGNOSIS. Basal rostral segment not attaining anterior margin of prosternum; body flat, smooth; head porrect, anteocular margins sinuate but without basal processes, apex semi-circularly rounded, entire.

GENERIC CHARACTERS. Head small, wider between eyes than long, shorter than median length of pronotum; juga longer than tylus, apically overlapping, apex evenly rounded, disc very feebly concave. Eyes prominent, protruding; ocelli as far apart as distant from eyes, placed well behind latter at base of head. Antennae missing.

Pronotum somewhat reniform; apical margin as wide as head through eyes, rather deeply emarginate to receive head, anterior apical corners obtusely rounded, not reaching level of eyes, i.e., not encircling base of head; anterolateral margins neither explanate nor foliaceous, entire, somewhat convex-arcuate, humeral region obtuse, not produced. Scutellum longer than wide at base, frena ending just before middle, apex entire, slightly narrowed, not exceeding apical margin of fifth abdominal tergite, surface distinctly depressed, flat. Hemelytral membranes reaching apex of abdomen, veins simple; external apical angle of corium acute, distinctly exceeding apex of scutellum; costal margin more or less evenly arcuate, hardly ampliate opposite third abdominal segment. Connexivum widely exposed, segmental angles rectilinear, not produced.

Bucculae feebly elevated, uniform in height, abruptly divergent behind middle, ending before base of head; buccular canal shallow. Rostrum arising from base of head well behind eyes, reaching apical margin of first visible abdominal sternite, basal segment short, stout, not surpassing anterior margin of prosternum; segment II longer than segments III and IV combined. Mesosternum bilaterally tumid with pronounced longitudinal furrow between

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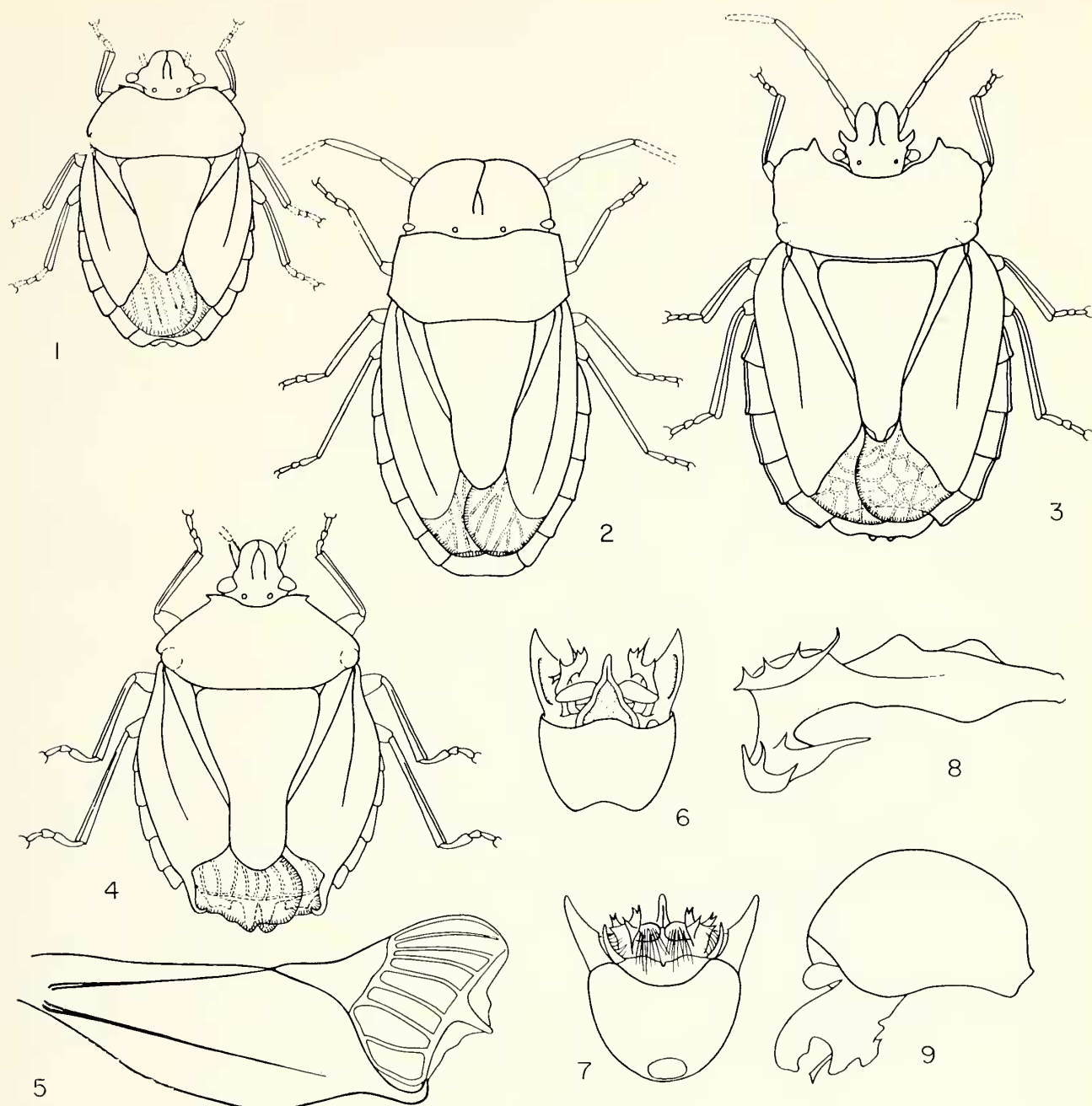


PLATE I

FIG. 1. **Placidicoris bivittatus**, new genus and species. ♀.

FIG. 2. **Tetragnetum megacephalum**, new genus and species. ♀.

FIG. 3. **Pandonotum punctiventris**, new genus and species. ♀.

FIGS. 4-9. **Uncinula tau** new genus and species. ♂. FIG. 4. dorsal facies. FIG. 5. left hemelytron. FIG. 6. pygofer, dorsal aspect. FIG. 7. pygofer, ventral aspect. FIG. 8. right paramere, ectal aspect. FIG. 9. aedeagus.

halves. Metasternum stoutly hexagonal, disc distinctly concave. Metacoxae slightly farther apart from one another than each is distant from its respective mesocoxa. Ostiolar peritreme stout, elevated, somewhat clavate, apex obtusely rounded ending at or near middle of metapleuron; margins of evaporatorium slightly elevated. Median portion of first visible abdominal sternite not tumid; median abdominal furrow very broad, shallow, vague. Legs moderate in size, tibiae prismatic, plano-sulcate on their upper surfaces.

REMARKS. The very short, stout, first rostral segment allies this new genus to *Dryptocephala* Laporte and *Psorus* Bergroth; its flat, overall shape, smooth surface, entire anterolateral pronotal margins, and absence of anteocular processes readily distinguish it.

I have selected the name *Placidocoris* to imply the smooth, unruffled appearance of the bug.

Placidocoris bivittatus new species

Fig. 1

DIAGNOSIS. Narrowly oval, slightly more than 9.0 mm in length; semiglossy, smooth, quite flat; pale flavescent or sordid ivory, punctures ferruginous and fuscous, sparingly distributed except on head; venter with pair (1 + 1) of broad, longitudinal, piceous punctured bands on abdomen.

SPECIFIC CHARACTERS. Head porrect, anteocular margins distinctly obtusely sinuate, apex semicircularly rounded, disc vaguely concave, lateral margins very feebly elevated; punctures dark ferruginous, dense, about as far apart as their own diameters, somewhat irregularly distributed; eyes reddish brown, prominent, protruding laterally; ocelli dull red.

Pronotum not quite two and one-half times as wide as long; punctures ferruginous and fuscous, some aggregated laterally in two longitudinal bands near anterolateral margins and separated from one another by equally broad flavescent, slightly thickened band; small cluster of punctures behind each cicatrix; other punctures sparingly, irregularly distributed leaving extensive pale areas visible; surface rather smooth; intramarginal furrow behind anterior margin with row of fine punctures; anterolateral margins slightly convex-arcuate, entire, anterior apical angles obtusely rounded, each with extremely minute acute, laterally projecting denticle; humeri slightly umbonate. Scutellum one-fifth longer than wide at base, quite flat, not elevated above level of pronotum; cluster of fuscous punctures near each basal angle, center of disc provided with prominent, irregular dusky cloud; other punctures scattered laterally with extensive, pale, glossy area visible, margins of postfrenal lobe impunctate. Hemelytra irregularly punctured, corium with large, oval, impunctate, darker discal spot; membranes hyaline, pale flavescent with two brown spots near center, veins concolorous. Connexivum pale flavescent, finely, densely ferrugino-punctate, basal angle of each segment piceous, apical angles of segments rectilinear, not produced.

Venter flavescent; pleura and basal portion of head finely, densely fusco-punctate; abdomen with broad intramarginal, finely ferrugino-punctate flavescent band followed ventrally by more coarsely punctured piceous band, disc flavescent, sparingly punctured, median area impunctate. Rostrum sordid testaceous, extreme apex piceous; segmental ratios: 30/85/40/30, i.e., segment II considerably longer than segments III and IV combined. Mesosternal xyphus and impressed disc of metasternum piceous, margins of latter sordid flavescent. Legs testaceous, femora and tibiae vaguely conspersed with minute, irregularly placed ferruginous dots.

Basal plates of female genital valves equilaterally triangular, their combined apical margins forming weakly convex arc across abdomen; apical plates rotund, barely exceeding apex of abdomen.

This species measures 9.5 mm in length; 5.5 mm in width across greatest abdominal diameter.

HOLOTYPE. Female, Missiones, Argentina, November 4, 1950. *Ex* collection N. A. Kormilev. Deposited in the American Museum of Natural History.

REMARKS. As a new species in a new genus this form has no close affiliates.

Tetragonotum new genus

Fig. 2

Type species: **Tetragonotum megacephalum** new species

DIAGNOSIS. Basal rostral segment attaining procoxae; from elliptical, twice as long as wide; flat; pronotum quadrangular, its anterolateral margins parallel to one another; rostral segment II almost twice as long as segments III and IV combined.

GENERIC CHARACTERS. Distinctly depressed, flat beneath, both upper and lower surfaces quite smooth; punctures fine.

Head porrect, as long as median length of pronotum, shorter than wide between eyes; eyes at extreme posterior lateral corners, not at all prominent; ocelli rather small, as far apart as distant from eyes; anteocular margins not sinuate, without basal processes, juga longer than tylus, apically overlapping. Antennae partially mutilated, assumedly five-segmented, segment I quite small, not reaching apex of head, about half the length of segment II.

Pronotum transversely quadrangular; anterior margin as wide as head through eyes, and essentially as wide as transhumeral diameter, barely emarginate centrally to receive head; anterolateral margins entire, parallel to one another, very narrowly carinate but not reflexed; humeri slightly umbonate. Scutellum triangular, about half again as long as wide at base, frena ending slightly behind middle, apex evenly rounded, reaching sixth abdominal tergite. Hemelytral membranes small, not reaching apex of abdomen; costal margin of embolium rather evenly arcuate, hardly ampliate toward base. Connexivum well exposed, segmental angles rectilinear, not at all produced.

Bucculae barely visible, not at all elevated; buccular canal shallow. Rostrum reaching basal abdominal sternite, segment I stouter than others, attaining procoxae; segment II twice as long as segments III and IV taken together. Mesosternum moderately tumid with shallow furrow between halves. Metasternum almost equilaterally hexagonal, rather flat. Mesocoxae and metacoxae mutually equidistant. Ostiolar peritreme lanceolate, terminating about three-fourths distance across plate. Median portion of first visible abdominal segment impressed; rostral groove obsolete.

REMARKS. This genus belongs near *Discocephala* Laporte. Its elliptical form, broadly quadrangular pronotum, and impressed portion of the first visible abdominal segment, distinguish the two.

The generic name **Tetragonotum** was selected to signify the prominent four-sided pronotum.

Tetragonotum megacephalum new species

Fig. 2

DIAGNOSIS. Head as large as pronotum, about three-fifths wider between eyes as long medially, lateral margins nearly parallel to one another, apex roundly truncate, anterior apical corners very obtusely rounded.

SPECIFIC CHARACTERS. Moderately large, about 14.0 mm in length, elliptical, depressed, flat beneath; sordid ivory with fine, somewhat congested, punctures unevenly distributed.

Head as specified in diagnosis, juga much longer than tylus, overlapping apically, apex of tylus barely exceeding middle of disc; eyes piceous, partially imbedded in posterior corners of head; ocelli dull red, essentially in line with eyes; punctures fuscous, fine, dense, somewhat irregularly distributed. Antennae partially mutilated, assumedly five-segmented, segment I and base of segment II flavescent, apex of II and all of segment III black; segments II and III distinctly compressed; segmental ratios: 20/40/77/—/—, i.e., segment II more than half as long as segment III.

Pronotum two and one-third times as wide as long; anterior apical angles feebly obtuse; disc with shallow, transverse furrow behind cicatrices; surface vaguely rugulose; punctures fuscous, tending to aggregate into nine vague, longitudinal, weakly diverging bands. Scutellum narrowly triangular, about half again as long as wide at base, surface slightly uneven, punctures fuscous, more regularly arranged than elsewhere, no particular color pattern discernible. Hemelytra rather unevenly punctured, with numerous pale laevigate areas visible; free apical margin of corium feebly convex-arcuate, external apical angle roundly obtuse; membranes rather small, not reaching apex of abdomen, almost colorless, pale brown toward inner basal area, veins pale brown, simple, few in number. Connexivum glossy, flavescent, densely punctured, with infuscated blotches; extreme lateral margin rather smooth, incisures barely evident.

Venter pale sordid ivory; punctures fuscous, restricted to vague elliptical band around body just inside lateral margins but not exceeding spiracles. Rostrum slender, reaching base of abdomen, segment II almost twice as long as segments III and IV combined. Mesosternum and metasternum pale. Spiracles black. Legs sordid flavescent; femora with a few accumulated ferruginous spots apically; tibiae prismatic, plano-sulcate above, with some uneven ferruginous spotting. Each marginal incisure on abdomen with small piceous mark at angles.

Basal plates of female genital valves trapezoidal, their angles rounded, their inner margins contiguous for most of length, apical margins feebly convergent medially; apical plates small, elliptical, distinctly divergent, reaching apical margin of abdomen.

This species measures 14.0 mm in length; 7.0 mm in width across greatest abdominal diameter.

HOLOTYPE. Female, Iguassu, Bahia, Brazil, July–August, 1923. Swedish Amazon Expedition, Dr. A. Roman, collector. Deposited in the Natural History Museum, Stockholm.

REMARKS. As a new species in a new genus this form has no close relatives.

Pandonotum new genus

Fig. 3

Type species: **Pandonotum punctiventris** new species

DIAGNOSIS. Depressed; head longer than wide between eyes; pronotum explanate, anterior margin wider than transhumeral diameter and encircling base of head, anterior apical angles surpassing level of eyes, reaching anteocular processes; dorsal surface without elevated tubercles or pustules.

GENERIC CHARACTERS. Broadly ovate, flat above, feebly convex beneath.

Head more or less porrect, subequal to median length of pronotum, longer than wide between eyes; anteocular processes prominent, directed obliquely anteriorly; juga longer than tylus, overlapping apically, apex rounded with distinct apical notch; disc slightly concave, vertex feebly elevated; eyes protuberant; ocelli small, twice as far apart as distant from eyes. Antennae five-segmented, strongly setose, reaching basal third of scutellum.

Pronotum somewhat quadrangular reniform, wider across anterior portion than across humeri, anterolateral margins diverging somewhat toward the anterior, anterior margin deeply emarginate, encircling base of head, terminating laterally in a triangular, anteriorly directed apical denticle which surpasses level of eyes and reaches middle of anteocular processes; anterolateral margins strongly explanate, foliaceous, extreme margin irregular, vaguely erose; humeri umbonate; transhumeral crest devoid of elevated tubercles or pustules. Scutellum elongate triangular, frena ending past middle, postfrenal lobe about half length of parafrenal portion, apex somewhat narrowly rounded, reaching apical margin of fourth

abdominal tergite, its margins feebly reflexed; disc flat without ornamentation. Hemelytra reaching apex of abdomen, membranes crepe-like in texture, veins coarsely reticulate; costal margin rather straight, obtusely ampliate near base, broadly, weakly reflexed there. Connexivum well exposed, apical angles of segments rectilinear, vaguely nodular, slightly produced.

Bucculae low, more or less uniform in height, divergent posteriorly; buccular canal moderately deep. Rostrum arising near base of head well behind line through eyes, reaching middle of abdominal disc, segment I slender attaining procoxae, followed by short intercalary unit, segment II weakly arcuate, subequal to segment III and IV combined. Mesosternum moderately tumid with shallow median furrow between halves. Metasternum flat, hexagonal, slightly wider than long. Mesocoxae slightly farther apart from one another than each is distant from its respective metacoxa. Ostiolar peritreme broadly linear, elevated, ending abruptly past the middle of metapleuron. Median abdominal furrow broad, very shallow.

REMARKS. The elongate head, narrow scutellum, rostrum with a small intercalary unit between the two basal segments, the somewhat widely separated mesocoxae, the coarsely reticulate hemelytral venation places this genus near *Eurystethus* Mayr.

The generic name **Pandonotum** implies the spread out pronotum which is wider across its anterior than across its transhumeral diameter.

Pandonotum punctiventris new species

Fig. 3

DIAGNOSIS. Broadly ovate, flattened above; sordid testaceous, punctures quite dense on venter.

SPECIFIC CHARACTERS. Sordid testaceous; punctures ferruginous and fuscous, fine, dense, irregularly distributed, somewhat congested in certain areas.

Head elliptical, slightly longer than median length of pronotum, one-third longer than wide between eyes; eyes protuberant, preceded by prominent, elongate, acute triangular spinous process; lateral margins sinuate at base, then parallel, juga longer than tylus, apically overlapping, apex evenly rounded with prominent median notch; vertex with percurrent black stripe. Antennae stout, strongly setose, reaching basal third of scutellum, segments piceous, joints narrowly flavescent, upper surface of basal segment pale yellow; segmental ratios: 40/50/60/70/—, i.e., segments progressively increasing in length, segment V missing.

Pronotum somewhat quadrangular reniform, two and one-half times as wide across greatest diameter as long medially; anterior margin wider than head through eyes, truncately excavated centrally to receive head, sigmoid laterally to encircle base of head, terminating in prominent triangular denticle of each side, apex of denticle exceeding level of eye and reaching middle of anteocular process; anterolateral margins explanate, foliaceous, feebly crose, somewhat divergent anteriorly so that pronotum is wider there than across umbonate humeri; disc uneven, with two shallow transverse furrows, one in front of, one behind cicatrices; transhumeral crest without elevated tubercles or pustules; punctures ferruginous and fuscous, darker ones aggregated in pair (1 + 1) of percurrent, vague, longitudinal, posteriorly divergent stripes near middle of disc, and small clusters on humeri. Scutellum one-third longer than wide at base, surface flat but slightly uneven, basal angles flavescent, narrowly calloused, median point on base vaguely tumid, barely elevated above level of pronotum, no elevated tubercles evident; apex narrowly rounded, its lateral margins fuscous, weakly reflexed; punctures fuscous, quite dense, small cluster of them behind each basal angle. Hemelytra quite unevenly punctured, punctures ferruginous and fuscous, darker ones aggregated in numerous small, irregularly distributed clusters; free apical margin of corium weakly

sinuate, external apical angle roundly rectilinear; membranes almost colorless, slightly darkened toward base, veins pale brown, coarsely reticulate. Connexivum sordid ivory, punctures ferruginous, sparse; spot on each segmental suture fuscous.

Venter sordid to pale flavescent; punctures fuscous, very dense, particularly laterally. Undersurface of head, with exception of protruding juga, uniformly fusco-punctate. Rostrum fulvous, basal segment uniform in diameter, intercalary segment small but distinct, not distended or enlarged. Median furrow of mesosternum and disc of metasternum punctured. Narrow lateral margins of abdomen flavescent with few punctures. Spiracles piceous surrounded by broken, irregular flavescent ring.

Genital valves of female four in number; basal plates almost rectangular, about as long as wide, inner margins contiguous for entire length, very narrowly reflexed, apical margins essentially truncate, slightly sloping laterally, apical plates oval, not exceeding apex of abdomen.

This species measures 13.5 mm in length; 7.0 mm in width across greatest pronotal diameter; 9.0 mm in width across greatest abdominal diameter.

HOLOTYPE. Female, Manaos, Brazil, no date. *Ex* collection H. Ruckes. Deposited in the American Museum of Natural History.

DISTRIBUTION. Brazil, Manaos.

REMARKS. As a new species in a new genus this form has no close affiliates.

Uncinala new genus

Fig. 4

Type species **Uncinala tau** new species

DIAGNOSIS. External apical angle of corium in male produced posteriorly into incurving, hooklike process along margin of apically truncate membrane; basal third of scutellum somewhat elevated into flat-topped triangular area; humeri not at all produced.

GENERIC CHARACTERS. Ovate; feebly convex above and beneath; head and anterior portion of pronotum weakly declivous.

Head oblong, shorter than median length of pronotum, longer than wide between eyes, without anteocular processes; lateral margins feebly sinuate at base, then parallel; juga longer than tylus, apically overlapping, apex evenly rounded without median incisure or notch; eyes large, protuberant; ocelli twice as far apart as distant from eyes. Antennae mutilated, basal segment reaching apex.

Pronotum hexagonal, wider than long; anterior margin sinuate centrally truncate behind eyes, terminating laterally in small, acute denticle slightly exceeding outer surface of eye, short intramarginal furrow present; anterolateral margins essentially straight, trenchant, very narrowly, abruptly reflexed; humeri umbonate, not at all produced, humeral angles rectilinear. Scutellum reaching onto seventh abdominal tergite (male); frena ending behind middle; basal portion of disc elevated into flat-topped triangular area not exceeding elevation of pronotum. Hemelytral membranes in male apically truncate, slightly surpassing apex of abdomen; external apical angle of corium in male produced posteriorly into elongated, incurved hooklike process along margin of membrane; veins simple, subparallel. Connexival angles rectilinear, not produced. Apical margin of seventh abdominal tergite in male moderately excavated, provided with median, retrorsely produced lobule.

Bucculae uniform in height, parallel, evanescent near base of head; buccular canal rather narrow, moderately deep. Rostrum arising in line with eyes, reaching past middle of abdomen, basal segment attaining procoxae, second segment weakly arcuate, shorter than length of segments III and IV taken together. Mesosternum feebly tumid with narrow, median, shallow

sulcus between halves. Metasternum narrowly hexagonal, almost rhomboidal, with thin, median, raised line. Mesocoxae and metacoxae mutually equidistant. Median abdominal furrow vague. Anterior margin of seventh abdominal sternite in male produced forward into acute angle reaching middle of disc.

REMARKS. This remarkable discocephaline appears to be closely related to *Agaclitus*, *Ablaptus*, and *Sympiezorhynchus*, although somewhat smaller than any species in those genera.

Uncinala, as well as the three genera mentioned above all exhibit sexual dimorphism as far as the differences in the form of the hemelytra are concerned in the two sexes, the males having the external apical angle of the corium somewhat acute and produced posteriorly along the edge of the membrane, which in this sex is proportionately small, subtriangular, and truncate along its free posterior margin, whereas in the females the membrane is proportionately larger, oval, with a rounded apical margin, and the external apical angle of the corium less acute and not produced posteriorly. Although I have no examples of females of **Uncinala**, I feel confident that when such are collected they will show the same basic characteristics in wing form as are exhibited in the other three genera.

In **Uncinala** the male genital segment (pygofer) is the most ornate of any that I have ever seen in the many genera and species of discocephalines that have been examined over the past several years. The details of the structure are given under the species description.

The name **Uncinala** refers to the hooked nature of the corium of the forewing.

Uncinala tau new species

Fig. 4

DIAGNOSIS. Apical margin of hemelytral membrane in male provided with prominent T-shaped sclerotization.

SPECIFIC CHARACTERS. Ovate, about 13.0 mm in length, widest across fifth abdominal segment; sordid yellow with fine, ferruginous and fuscous punctures somewhat unevenly distributed; beneath flavescent, punctures fuscous, slightly larger and more congested than above.

Head elongate, oval, or oblong, four-sevenths longer than wide between eyes; lateral margins weakly sinuate near base, then parallel, juga longer than tylus, apically overlapping, apex evenly rounded, entire; anterior half of disc shallowly concave, tylus feebly elevated; punctures ferruginous, about as far apart as their own diameters; eyes fuscous, large, protuberant; ocelli light red. Antennae missing, basal segment reaching apex of head, sordid ivory with fuscous blotches; antennal tubercles somewhat prominent, visible from above.

Pronotum hexagonal, about two and one-half times as wide as long; anterior margin prominently excavated centrally to receive head, then truncate behind eyes, lateral acute denticle ivory; anterolateral margins trenchant, essentially straight, ending abruptly just before humeri leaving minute notch there; humeri weakly umbonate; surface slightly uneven, pair (1 + 1) of vague, low, obtuse elevations near middle of disc about as far apart as each is distant from its respective anterolateral margin; punctures dark ferruginous, rather dense, most closer together than their own diameters, but somewhat unevenly distributed.

Scutellum about one-fourth longer than wide at base, frena ending well past middle, post-frenal lobe about three-fourths length of anterior portion, its margins parallel, apex somewhat broadly rounded, the extreme median portion feebly impressed; basal portion of disc elevated into flat-topped triangular area continued posteriorly as obtuse median ridge evanescent near region where frena end; basal angles flavescent, narrowly calloused; punctures unevenly distributed, fewest on center of elevated basal triangular area and near apex; large irregular fuscous patch mesad of each basal angle. Hemelytra unevenly punctured, numerous small, pale laevigate areas visible; costal margin feebly ampliate near base of abdomen, then weakly sinuate toward base of wing; free apical margin of corium sinuate in male, its external apical angle prolonged posteriorly into hooklike process along margin of membrane; membrane in male triangular, its outer margin truncate, clear rich pale brown, veins concolorous, subparallel, apical margin provided with stout T-shaped sclerotization, the stem of the "T" exceeding extreme margin of membrane. Connexivum moderately exposed, flavescent with few punctures, segmental sutures bordered with fuscous bands, apical angles of segments rectilinear, not produced.

Ventral surface of body densely, congestedly punctured; lateral portions of propleura, mesosternum, median area of metasternum, and evaportoria castaneous, median raised line on metasternum flavescent. Rostrum testaceous, reaching basal half of seventh abdominal sternite in male, segment II about one-fourth shorter than segment III and IV taken together. Ostiolar peritreme flavescent, linear, tapering slightly beyond middle of metapleuron. Legs sordid flavescent, femora and tibiae covered with irregular, pale fulvous small blotches which tend to aggregate in two vague annuli near apex of posterior femur; tarsi and apex of tibiae infuscated. Abdomen flavescent, median area almost impunctate, lateral portions densely and congestedly fusco-punctate, margin of each segment with small, quadrangular flavescent spot, seventh sternite more sparingly punctured; pair (1 + 1) of fulvous patches laterad of shallow median furrow.

Male genital segment (pygofer) large, broadly ovate (figs. 6-9); lateral apical lobes with basal quasiarticulation, narrowly elongate, triangular, divergent, apices acute, dorsal surfaces concave, ventral surfaces flattened; dorsal border of capsule bisinuate, feebly produced at its middle, genital cup rather deep; proctiger deflexed near its midpoint, anal aperture opening ventrally, dorsal median portion membranous, lateral margins strongly calloused and convergent to point of flexion there uniting and continued posteriorly as projecting spur, producing a Y-shaped figure and, at point of "Y" where arms and stem meet, provided with pair (1 + 1) of lateral, very stout, calloused, elliptical lobes extending over bases of parameres, each lobe bearing on its ventral surface a vertical fringe of long, dense castaneous hairs somewhat resembling fringes of baleen; base of proctiger provided with pair (1 + 1) of stout, semivertical, stout apodemes, the dorsal margins of which extend as almost semi-circular, small lobes just beneath the lateral portion of dorsal border; parameres foliaceous, parallel to one another, head expanded into acanthus-like leafy pattern with numerous minute denticles, hooded and declivous over ventral apical margin but not reaching apices of lateral apical lobes; ventral apical margin sinuate with very minute median notch, lateral corners provided with arcuate acicular spinous process paralleling inner margin of lateral apical lobe; submarginal impression quite deep, rotund.

This species measures 12.5 mm in length; 7.25 mm in width across greatest abdominal diameter.

HOLOTYPE. Male, Bahia, Brazil, November, 1957. Deposited in the American Museum of Natural History. Paratype, male, same data as for holotype.

DISTRIBUTION. Brazil, Bahia.

REMARKS. As a new species in a new genus there is no close affiliate.

The fantastic construction of the pygofer, particularly the proctiger, must be considered as a specialization of very high degree. No other discocephaline, nor for that matter any other pentatomid which I ever examined, shows such a complicated structural pattern.

The specific name **tau** was selected to call attention to the peculiar T-shaped sclerotization on the hemelytral membrane in the male.

Grassator new genus

Figs. 10-20

Type species: *Platycarenum nigroventris* Ruckes

DIAGNOSIS. Head as long as median length of pronotum and subequal to width between eyes, or slightly longer, margin from eye to eye not semicircular; mesosternum tumid with punctured longitudinal furrow between halves; metasternum hexagonal, impressed, punctured; antennae barely reaching base of scutellum; rostrum attaining seventh abdominal sternite, segment II shorter than segments III and IV taken together.

GENERIC CHARACTERS. Ovate, ranging from 10.0 mm to 11.0 mm in length; somewhat depressed above, feebly convex beneath; head and anterior portion of pronotum weakly declivous.

Anteocular margin of head strongly sinuate leaving prominent, triangular basal lobe, sinus rectilinear to obtuse, margins then feebly ampliate, mildly reflexed, apex rather broadly rounded; juga only slightly longer than tylus, connivent but not overlapping; disc shallowly concave with tylus and vertex vaguely elevated; eyes protuberant, ocelli small, about as far apart as distant from eyes. Antennae strongly setose, barely reaching base of scutellum, segments II and III subequal, terminal segment fusiform.

Pronotum subhexagonal, posterior angles very obtusely rounded; anterior margin as wide as head through eyes, anterior apical angles obtuse, or obtusely rounded without denticles; anterolateral margins trenchant, slightly explanate, ending abruptly just before humeri leaving small obtuse notch there; shallow transverse furrow across disc behind cicatrices, surface somewhat uneven; humeri umbonate, humeral angles not produced. Scutellum longer than wide at base, frena ending slightly behind middle, postfrenal margins weakly convergent, apex evenly rounded, reaching base of sixth abdominal tergite. Hemelytral membranes barely attaining apex of abdomen, external apical angle of corium roundly rectilinear, costal margin evenly arcuate without ampliation near base of abdomen. Connexivum exposed, apical segmental angles rectilinear, not produced.

Bucculae weakly elevated, more or less uniform in height, divergent posteriorly, evanescent near base of head; buccular canal rather shallow. Rostrum arising from base of head in line with eyes, reaching seventh abdominal sternite, segment II arcuate, distinctly shorter than segments III and IV taken together. Mesosternum tumid with wide, punctured, longitudinal furrow between halves, xyphus quadrangular also punctured, its apex truncate. Metasternum hexagonal, basal and apical margins truncate, each about half the length of any one of remaining four sides; disc impressed, distinctly punctured. Mesocoxae and metacoxae mutually equidistant. Ostiolar peritreme elevated, scalpeliform, apex ending abruptly near middle of metapleuron. Median abdominal furrow well developed. Basal margin of seventh abdominal sternite in male produced forward into acutely rounded angle; homologous margin of sixth sternite obtusely arcuate.

REMARKS. When I first described the type species *Platycarenum nigroventris* in 1958, I was under the impression that the forms of the mesosternum and

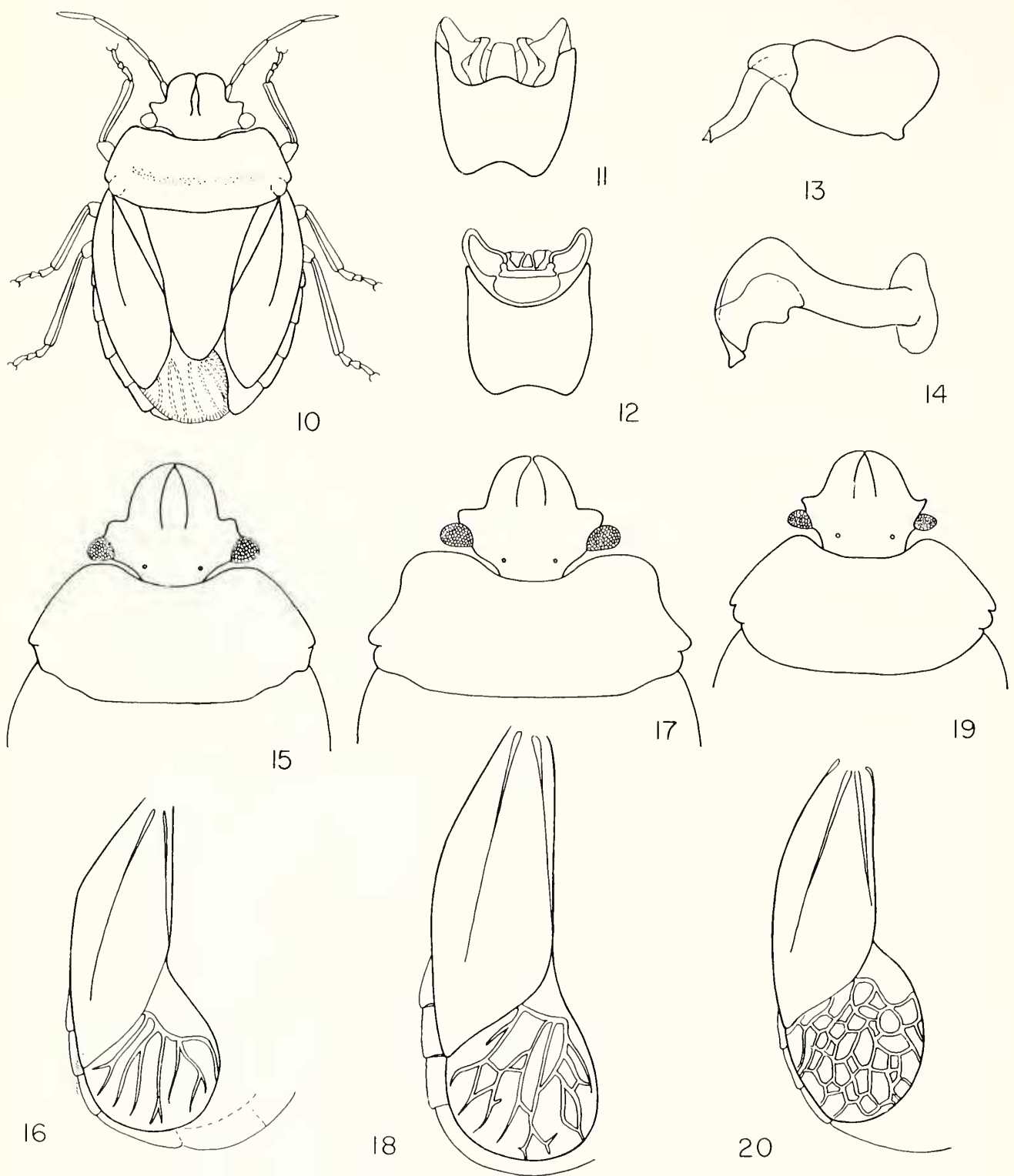


PLATE II

FIGS. 10-16. **Grassator nigroventris** (Ruckes), new genus. Fig. 10. dorsal facies. Fig. 11. pygofer, dorsal aspect. Fig. 12. pygofer, ventral aspect. Fig. 13. aedeagus. Fig. 14. right paramere, ectal aspect. Fig. 15. head and pronotum. Fig. 16. left hemelytron.

FIGS. 17-18. **Grassator sinuatus** new species. Fig. 17. head and pronotum. Fig. 18. left hemelytron.

FIGS. 19-20. **Grassator reticulatus**, new species. Fig. 19. head and pronotum. Fig. 20. left hemelytron.

metasternum, as well as the extensively piceous venter were basic features which showed phyletic affiliation with *Platycarenum*, and its relative *Discocephalessa*, since all have these characteristics in common. I apparently was misled; greater stress should have been laid on the form and proportions of the head and the segmental ratios of the antennae and rostrum, in addition to the differences in size of the genera. Moreover there is considerable difference evident in the construction of the male genitalia in all three genera.

After considerable study I have come to the conclusion that the new genus **Grassator** is closer to *Mecistorhinus* Dallas than to any other discocephaline and it rightfully should be placed there. This change in phyletic position removes it from the tribal division to which *Platycarenum* and its allies belong.

All specimens in the following three species come from Costa Rica and were taken from imported fruit and flowers which were impounded at various ports of entry into the United States. I have selected the generic name **Grassator** to signify a vagrant traveler, which these bugs appear to be.

Grassator nigroventris (Ruckes)

Figs. 10-16

Platycarenum (Discocephalessa) nigroventris Ruckes, 1958, Amer. Mus. Novitates, No. 1868, p. 2.

DIAGNOSIS. Transverse pronotal furrow pale yellow with fewer punctures than elsewhere on disc; hemelytral membranes with five or six simple veins.

SPECIFIC CHARACTERS. Pale testaceous above with reddish, fuscous, and piceous punctures irregularly distributed on pronotum, more evenly disposed elsewhere; corium with prominent, impunctate, pale discal spot; beneath piceous, lateral margins of head, thorax and abdomen narrowly flavescent with dense black punctures.

Head about as long as wide between eyes; anteocular sinuses deep, rectilinear, rather prominent, margins before them feebly ampliate, reflexed, disc slightly concave, apex somewhat broadly rounded; eyes protuberant with distinct notch between them and anteocular margins. Antennae pale with light brown dots and vague annulations, apical portion of terminal segment darker; segmental ratios 20/33/34/45/50, i.e., segment II longer than I, subequal to III.

Pronotum distinctly undulant; transverse furrow behind cicatrices pale flavescent, sparsely punctured; anterolateral margins feebly convex-arcuate, weakly reflexed, ending abruptly just before humeri, anterior apical angles very broadly rounded. Scutellum one-third longer than wide at base, punctures dense, rather evenly distributed, in some cases with three flavescent spots across base. Hemelytra rather evenly punctured, free apical margin of corium straight, external apical angle roundly rectilinear; membranes barely reaching apex of abdomen, pale brown or smoky yellow, almost opaque, darkening slightly toward apical margins, veins simple, five or six in number. Connexivum narrowly exposed, testaceous, punctures and margins of sutures fuscous. Apical margin of seventh abdominal tergite in male evenly arcuate with small median, semicircular membranous lobule.

Major portion of venter black; lateral portions of head, thorax, and abdomen up to spiracles flavescent, provided with dense black punctures; connexival incisures black. Rostrum fulvous, extreme apex fuscous reaching onto seventh abdominal sternite, apex of segment II reaching metacoxae. Legs flavescent with coalescent ferruginous dots and blotches on femora and broken rings on tibiae.

Basal plates of female genital valves trapezoidal, slightly longer than wide, inner margins slightly thickened, straight, contiguous for entire length, apical margins truncate.

Genital capsule (figs. 11, 12) subcuboidal, somewhat depressed; central portion of dorsal border convex-arcuate, lateral portions strongly concave so that genital cup is impressed into capsule beneath dorsal border; lateral apical lobes stubby, barely longer than wide, stout, slightly upturned, feebly divergent, apices blunt, ventral surfaces clearly impressed; ventral apical margin truncate with nodular lateral ends; submarginal impression broad, deep, and continued onto undersurfaces of lateral apical lobes; proctiger stoutly cylindrical, deflexed apical end somewhat narrowed; parameres (fig. 14) lying more or less horizontally, apical ends declivous, convergent, overhanging ventral apical margin, head somewhat excavated on ectal surface to form shallow hood; aedeagus (fig. 15) somewhat bean-shaped with shallow dorsal depression, vesica slightly sigmoid with bifurcated apex.

This species measures 10.5 mm in length; 6.0 mm in width across greatest abdominal diameter.

TYPES. Holotype, male, allotype female, paratypes, three females. All taken from imported bananas and deposited in the American Museum of Natural History.

TYPE LOCALITY. *Costa Rica.*

DISTRIBUTION. Costa Rica.

REMARKS. The above redescription excludes some detail given in the original description but adds a few critical characters not previously mentioned, particularly in the description of the male external genitalia.

In addition to the type series there are a number of specimens in the collection of the United States National Museum which also come from Costa Rica and which bear neither specific locality nor date. All were taken from impounded imported bananas at New Orleans, Galveston, or New York.

***Grassator sinuatus* new species**

Figs. 17, 18

DIAGNOSIS. Anterolateral margins of pronotum sinuate at middle, distinctly ampliate toward anterior; anterior margin wider than head through eyes; veins of hemelytral membranes anastomosing.

SPECIFIC CHARACTERS. Ovate; above matte, sordid ochraceous, punctures piceous, uniform in size, unevenly distributed, some forming small clusters but not arranged in any particular design, overall color mottled medium brown; beneath semiglossy, almost entirely black, only legs, rostrum, and small lateral marmorate areas flavescent to ochraceous; punctures black, very dense, congested.

Head as long as wide between eyes; anteocular margins distinctly reflexed, deeply sinuate, sinus rectilinear, basal lobule stout, its apex obtusely rounded, juga barely ampliate, apex slightly narrowed with small median notch; punctures more or less evenly distributed; eyes protuberant, silvery gray, ocelli quite small, pale crimson. Antennae mutilated.

Pronotum almost quadrilateral; anterior margin almost as wide as posterior, truncately excavated to receive head, broadly convex-arcuate behind eyes, apical corners obtusely rounded, exceeding eyes; anterolateral margins subreflexed, distinctly sinuate at middle, anterior half somewhat explanate, posterior trenchant, only weakly expanded; discal surface undulant, transverse furrow well defined, concolorous with remainder of disc; punctures

irregularly distributed, clustered and congested leaving small, sparingly punctured central flavescent area in form of stylized pine tree with apex touching anterior margin and base of trunk reaching posterior margin. Scutellum slightly more than one-fifth longer than wide at base, rather flat, apex somewhat narrowly rounded, basal angles with pronounced calloused flavescent spot with three black punctures; other punctures dense, unevenly distributed. Hemelytra with less congested and more widely spaced punctures than elsewhere, corium with conspicuous, impunctate pale discal spot at each end of which is a small cluster of piceous punctures; embolium with fewer, coarser punctures near base; membranes not reaching apex of abdomen, veins raised, irregularly anastomosing, membranes rich orange-brown, veins concolorous. Connexivum ochraceous, punctures fuscous, sutures and incisures banded with black.

Rostrum sordid orange-ochraceous, apex fuscous reaching middle of terminal abdominal sternite, segment II shorter than segments III and IV combined, its apex reaching metacoxae. Legs flavescent, femora with coarse, coalescing round, castaneous spots, some forming antepical annulus, tibiae with vague, irregularly scattered castaneous dashes; tarsi light castaneous. Mesosternum with wide median furrow, coarsely punctured. Metasternum likewise punctured. Median abdominal furrow impunctate, wide, shallow, extending through sixth sternite.

Basal plates of female genital valves black, impunctate, equilaterally triangular, inner margins slightly thickened, contiguous for entire length.

This species measures 11.5 mm in length; 7.0 mm in width across greatest abdominal diameter.

HOLOTYPE. Female, Costa Rica, no date. Taken from bananas. *Ex* collection H. Ruckes. Deposited in the American Museum of Natural History.

DISTRIBUTION. Costa Rica.

REMARKS. This single specimen has been in the collection of the American Museum for many years during which time it defied identification. It is a more robust, darker species than *nigroventris*, without the contrastingly colored transverse pronotal furrow, with sinuate, more explanate anterolateral margins, and with an anterior margin which is wider than the head through the eyes; in addition the hemelytral membranes are differently veined.

***Grassator reticulatus* new species**

Figs. 19, 20

DIAGNOSIS. Transverse pronotal furrow shallow, concolorous with disc; anterolateral pronotal margin essentially straight, trenchant, hardly explanate; hemelytral membranes uniformly smoky brown, veins irregularly reticulate.

SPECIFIC CHARACTERS. Narrowly ovate; above matte, pale ochraceous, punctures very fine, dense, irregularly distributed, piceous to ferruginous, many contiguous, most hardly farther apart than own diameters, fewest toward anterolateral margins of pronotum; basal angles of scutellum calloused, flavescent; hemelytra with elongate, impunctate, pale discal spot; beneath semiglossy, sordid testaceous, median area becoming fuscous, punctures piceous, quite dense, somewhat congested.

Head slightly longer than wide between eyes; basal lobule on margins just before eyes, triangular, its apex rectilinear, margins then obtusely sinuate, juga feebly ampliate, apex slightly narrowed with shallow median notch; punctures piceous, very dense, unevenly distributed; eyes dull carnelian, ocelli very small, almost invisible. Antennae short, stout, hardly

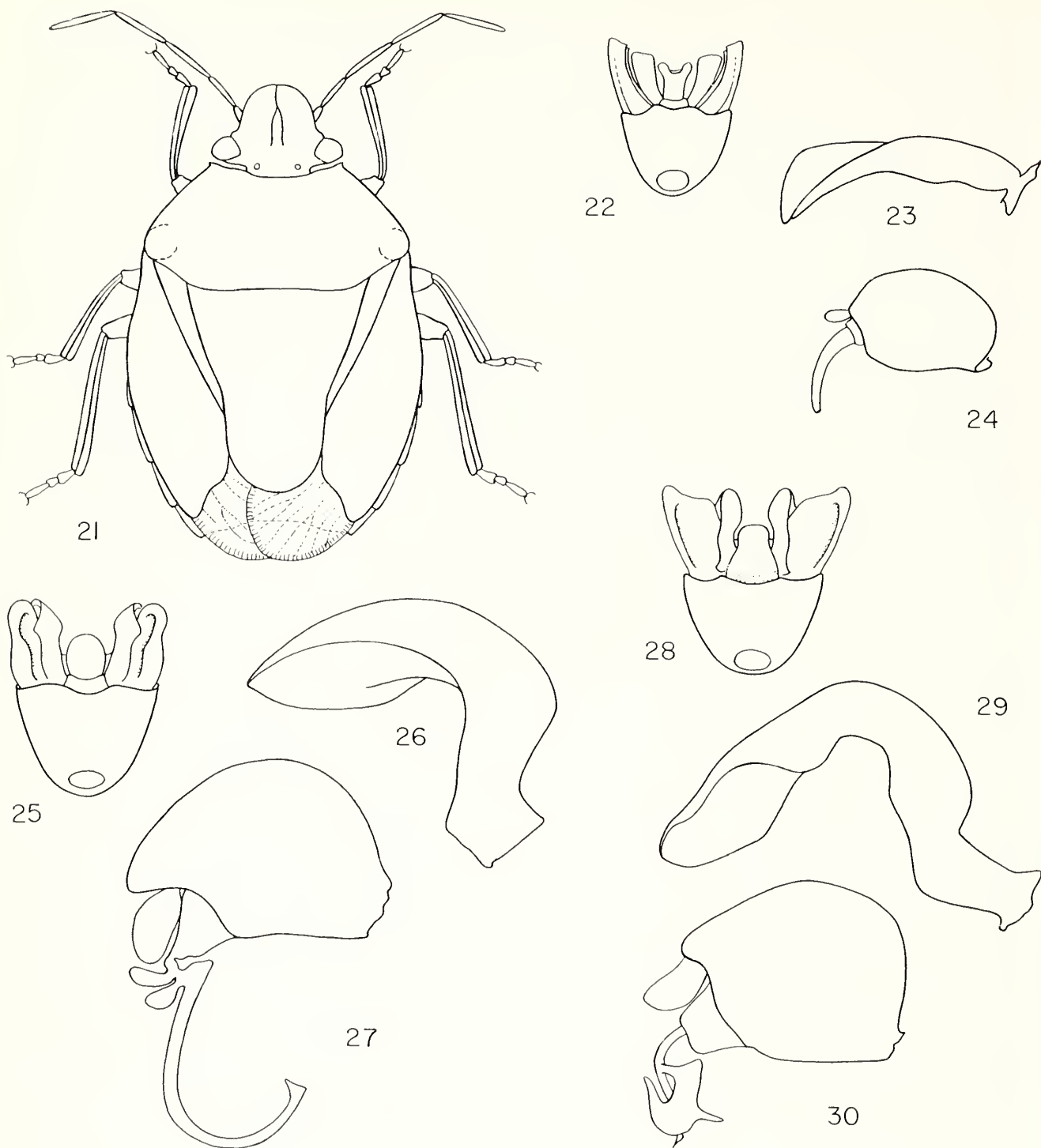


PLATE III

FIGS. 21-24. *Patronatus binotatus* new genus and species. Fig. 21. dorsal facies. Fig. 22. pygofer, dorsal aspect. Fig. 23. right paramere (ectal aspect). Fig. 24. aedeagus.

FIGS. 25-27. *Patronatus punctissimus* new species. Fig. 25. pygofer, dorsal aspect. Fig. 26. right paramere, ectal aspect. Fig. 27. aedeagus.

FIGS. 28-30. *Patronatus flavicrus* new species. Fig. 28. pygofer, dorsal aspect. Fig. 29. right paramere, ectal aspect. Fig. 30. aedeagus.

reaching posterior margin of pronotum, sordid ochraceous, basal three segments mottled with ferruginous dots, fourth and fifth segments fuscous with narrow, ivory bases; segmental ratios: 20/30/30/40/60, i.e., segment II half again as long as I, equal to III.

Pronotum slightly less than two and one-half times as wide as long; anterior margin

as wide as head through eyes, truncately emarginate centrally to receive head, then convex-arcuate behind eyes, anterior apical corners roundly obtuse; anterolateral margins essentially straight, trenchant, hardly explanate, very feebly reflexed; transverse furrow ill defined, concolorous with disc; punctures quite dense, irregularly spaced on anterior half, fewest between cicatrices and anterolateral margins; humeri umbonate, not produced. Scutellum about one-fourth longer than wide at base, apex slightly narrowed, evenly rounded, punctures fuscous and ferruginous, quite dense, many aggregated into short strings and small clusters across base and along lateral margins; discal surface rather flat. Punctures on corium fuscous, disc with pale spot with adjacent vague brown cloud; embolium paler than corium, punctures ferruginous; membranes not reaching apex of abdomen, uniformly dull brown, veins darker, raised, distinctly reticulated. Connexivum ochraceous, punctures reddish ferruginous, sutures and incisures broadly banded with black. Tergum entirely piceous.

Mesosternum black, median furrow narrow, but distinct. Metasternum black with short, median, reddish fulvous stripe. Abdomen rich fulvous, darkening toward middle, densely punctured, punctures piceous, congested; median furrow impunctate, reaching terminal sternite; lateral incisures and extreme margins black. Rostrum fulvous, attaining base of seventh abdominal sternite, segment II slightly exceeding metacoxae, distinctly shorter than segments III and IV combined. Legs flavescent, femora with conspicuous ferruginous dots and anteapical fuscous annulus; tibiae vaguely biannulate, annuli fuscous, distal one near apex; tarsi medium brown.

Basal plates of female genital valves subtrapezoidal, flavescent, densely punctured, lateral margins slightly arcuate, inner margins thickened, contiguous for entire length, apical margins truncate.

This species measures 10.0 mm in length; 5.0 mm in width across humeri.

HOLOTYPE. Female, no date, Caracas, Venezuela. Taken at San Francisco from imported orchids (*Cattleya gaskelliana*) by Inspector No. 38485. Deposited in the United States National Museum.

DISTRIBUTION. Venezuela, Caracas.

REMARKS. The overall color of **reticulatus** is somewhat reddish fulvous and paler than the other two species. The short, distinctly reticulate hemelytral membranes, the straight, narrow anterolateral pronotal margins, and the narrower anterior pronotal margin separate this from both *nigroventris* and **sinuatus**.

Patronatus new genus

Figs. 21-30

Type species: **Patronatus binotatus** new species

DIAGNOSIS. 13.0 mm to 16.0 mm in length; pronotum with percurrent pale line; rostrum not exceeding middle of abdominal disc; male without median retrorse process or lobe on margin of terminal abdominal tergite.

GENERIC CHARACTERS. Broadly oval; quite convex above, much flatter beneath; head and anterior portion of pronotum mildly declivous; punctures fine, dense.

Head shorter than median length of pronotum, longer than wide between eyes, disc weakly concave; anteocular margins weakly sinuate near base, then subparallel, or vaguely convergent to evenly rounded, entire, rather broad apex; juga longer than tylus, narrowly overlapping apically; eyes large, protuberant; ocelli prominent, about twice as far apart as distant from eyes. Antennae five-segmented (in one species apparently four-segmented), reaching onto basal third of scutellum, segment I not reaching apex of head.

Pronotum hexagonal, slightly more than twice as wide as long; anterior margin as wide as head through eyes, shallowly excavated centrally, truncate behind eyes, terminating laterally in a very minute, acute denticle; anterolateral margins straight, entire, vaguely carinate, very narrowly reflexed; humeri obtuse, not at all produced; disc with percurrent, median, pale line. Scutellum stout, evenly convex, smooth, frena ending slightly behind middle, apex evenly, broadly rounded, reaching apical margin of sixth abdominal tergite. Hemelytra attaining apex of abdomen, costal margin not ampliate near base of abdomen, external apical angle of corium roundly acute, feebly produced posteriorly in male. Connexivum narrowly exposed, segmental angles rectilinear, not produced. Apical margin of seventh abdominal tergite in male devoid of median, retrorse process or lobe.

Bucculae subparallel, very slightly divergent posteriorly, low, uniform in height, ending more or less abruptly near base of head. Rostrum arising in line with eyes, basal segment attaining procoxae, apex not exceeding middle of abdominal disc, segment II weakly arcuate, reaching between mesocoxae and metacoxae, shorter than lengths of segments III and IV combined. Mesosternum barely tumid, median sulcus vague, xyphus with thin raised median line. Metasternum rhomboidal, slightly longer than wide, flat, with distinct thin, median, raised line contiguous with one on xyphus. Mesocoxae and metacoxae mutually equidistant, rather close together. Tibiae plano-sulcate on upper surfaces. Ostiolar peritreme thin, digitiform, straight, ending abruptly before reaching middle of metapleuron, then continued obliquely forward as thin, tapering ruga which reaches anterior margin of plate. Median abdominal furrow shallow. Basal margin of seventh abdominal sternite in male produced forward into acute angle, about 80° , not reaching middle of disc, median length of segment less than twice marginal length; suture between sixth and seventh sternites feebly bisinuate. Proctiger in male distinctly deflexed at its middle, anal aperture opening ventrally. Combined apical margins of basal plates of female genital valves forming transverse arc near end of abdomen.

REMARKS. This new genus shows certain characteristics which are intermediate between *Sympiezorhynchus* and *Mecistrorhinus*; the male genitalia, described under species headings would more likely place this new form nearer *Sympiezorhynchus*.

***Patronatus binotatus* new species**

Figs. 21-24

DIAGNOSIS. Humeri calloused, flavescent; antennal segments II and III flavescent with piceous dots; sulcate surfaces of tibiae rosy red.

SPECIFIC CHARACTERS. Oval, moderately large, 14.0 mm to 15.0 mm in length; glossy to semiglossy both above and beneath; sordid flavescent, punctures piceous, sparsest on pronotum and scutellum, mostly arranged in well-spaced clusters there.

Head broadly oval, about three-fourths median length of pronotum, slightly more than one-fourth longer than wide between eyes; lateral margins broadly, shallowly reflexed, disc feebly concave; tylus and vertex with percurrent pale, median line continued onto pronotum; punctures very dense, congested, almost all contiguous with one another; margin from eye to eye somewhat parabolic in outline; eyes dull reddish brown, ocelli quite large, topaz or flavescent. Antennae very finely setose, sordid flavescent and fuscous, basal three segments stippled with fuscous dots, segment IV almost entirely fuscous, basal fourth of segment V flavescent; segmental ratios: 20/32/38/50/60 (male), 20/40/35/50/60 (female), i.e., slight evidence of sexual dimorphism relative to segments II and III.

Pronotum not quite two and one-half times as wide as long; punctures of two kinds, coarser piceous ones aggregated into irregular, well-spaced clusters and vague longitudinal

bands intermixed with exceeding fine, ferruginous ones; moderately broad piceous band parallel to anterolateral margin; median pale linea percurrent and continued onto basal third of scutellum; humeri glabrous, calloused, conspicuously ochraceous-flavescent. Scutellum robust, one-fifth longer than wide at base, quite convex, smooth, disc with vague, irregular rhomboidal piceous patch, punctures of two sizes, coarser piceous ones aggregated into a few clusters and vague longitudinal, submarginal bands, intermixed with exceedingly fine, ferruginous ones; apex somewhat broadly rounded, not at all reflexed, its margin provided with pair (1 + 1) of small piceous patches. Hemelytra finely, densely punctured, punctures no farther apart than their own diameters, quite evenly distributed, with few stellate pale points evident; disc with fuscous patch at end of main vein; free apical margin of corium feebly concave, external apical angle roundly acute, exceeding apex of scutellum; membranes pale olive drab, veins slightly darker, straight, simple, in some instances bifurcate; apical margin of membrane in male vaguely truncate. Connexivum very densely punctured, basal half of each segment piceous, apical half ochraceous.

Venter sordid flavescent to fulvous, punctured throughout. Rostrum reaching fourth abdominal sternite. Legs sordid flavescent, femora covered with conspicuous subcircular, piceous dots of various sizes; sulcate surface of tibiae bright rosy red, margins and under-surfaces with piceous and fuscous dots and dashes, tarsi unevenly infuscated. Punctures on abdomen becoming finer and denser laterally; spiracles black, narrowly ringed with ivory; minute ivory point adjacent to each pair of trichobothria.

Basal plates of female genital valves roundly triangular, essentially equilateral, inner margins contiguous for entire length, apical margins taken together forming distinct convex arc across end of abdomen.

Pygofer (fig. 22) stoutly ovate; central portion of dorsal border feebly sinuate over base of proctiger; lateral apical lobes about as long as capsule, horizontal, parallel to one another, upper surfaces shallowly sulcate longitudinally, apices roundly truncate, slightly exceeding tips of parameres; ventral apical margin between lateral apical lobes reflexed, shallowly sinuate; impression below margin shallow, lunate in outline; proctiger (dorsal aspect) almost cuboidal, crest with pair (1 + 1) of divergent, obtuse tubercles, lateral walls densely pilose, apical face (posterior aspect) almost orbicular, lateral margins thickened to form pair of parentheses, median portion impressed, anal aperture rather broad; parameres (fig. 23) stoutly wedge-shaped, basal arm and head very obtusely bent on one another, dorsal surface of head distinctly convex, apical portion weakly declivous, apical margins roundly truncate, not reaching apices of lateral apical lobes; aedeagus completely sclerotized, black, stubby, phallosome ovoid with pair (1 + 1) of small, oval lobes at apical end, vesica quite short, arcuate without accessory ornamentation (fig. 24).

This species measures 14.75 mm in length; 8.75 mm in width across humeri.

HOLOTYPE. Male, Barro Colorado Island, Canal Zone, Panama, August 17, 1923. Deposited in the American Museum of Natural History. Allotype, female. Same data as for holotype except April 30, 1962, H. Ruckes, collector. Paratypes, female (two), Chiriqui, Panama (one), deposited in the National Museum of Natural History, Paris; Santo Domingo, Colombia, August 10, 1930, deposited in the American Museum of Natural History.

DISTRIBUTION. Panama, Barro Colorado Island; Chiriqui. Colombia, Santo Domingo.

REMARKS. As a new species in a new genus this form has no close affiliates except the following two species.

In contrast with the following two species in this genus, *binotatus* has much smaller male genital organs, less specialized parameres, and less ornate aedeagus. In all three species the phallotheca is provided with either one or two pairs of small lobes at its apical end, a feature that is not common to other species of discocephalines.

***Patronatus punctissimus* new species**

Figs. 25–27

DIAGNOSIS. Punctures uniform, very dense, fine, no farther apart than their own diameters, very regularly distributed; legs flavescent, femora with piceous spots, tibiae without roseate sulcate surfaces, almost immaculate.

SPECIFIC CHARACTERS. Oval, semiglossy above and beneath; sordid testaceous, densely overlain with fine, uniform, evenly distributed punctures above, undersurface of head, thoracic pleura and wide lateral portions of abdomen with dense punctures, sterna and central portion of abdomen with somewhat coarser and more widely spaced punctures.

Head oval, extreme margins very narrowly pale, impunctate; disc feebly concave; punctures almost all contiguous with one another; eyes ovate, protuberant; ocelli reddish, three times as far apart as distant from eyes. Antennae mutilated, assumedly five-segmented, basal three segments uniformly piceous; segmental ratios: 20/30/35/—/—, i.e., segment II half again as long as I, slightly shorter than III; segments IV and V missing.

Pronotum slightly more than twice as wide as long; extreme anterolateral margins very narrowly pale, almost reflexed; larger piceous punctures interspersed with extremely minute ferruginous ones, piceous punctures denser and finer just inside anterolateral margins; disc provided with pair (1 + 1) of posteriorly divergent, vague, pale impunctate stripes about midway between median pale line and anterolateral margins; humeri and disc concolorous. Scutellum less than one-third longer than wide at base, median area with vague obtuse, slightly elevated ridge, median pale line extending onto basal third; piceous punctures interspersed with numerous extremely fine ferruginous and fuscous ones; apex broadly rounded, reaching apical margin of terminal tergite in male, lateral margins with small fuscous patch, extreme median portion minutely flavescent. Hemelytra quite uniformly punctured, without discal spot, small cluster of denser punctures at end of main vein; free apical margin of corium feebly sigmoid; membranes pale brown darkening basally, veins concolorous, apical margin in male rather evenly rounded. Connexivum testaceous, densely ferrugino-punctate; basal two-thirds of each segmental margin piceous, apical third testaceous.

Margins of bucculae sordid flavescent. Rostrum testaceous, reaching middle of abdominal disc. Legs flavescent, femora provided with unevenly spaced conspicuous piceous dots, tibiae more or less free of maculations, in some cases only one or two piceous dots visible, dorsal sulcate surfaces concolorous, tarsi uniformly testaceous.

Basal plates of female genital valves triangular, slightly wider than long, angles rounded, inner margins contiguous; visible portions of apical plates large, elliptical, exceeding apical margin of abdomen.

Pygofer (fig. 25) broadly ovate; dorsal border distinctly sinuate over base of proctiger; lateral apical lobes stout, feebly divergent, upper surfaces with thin, membrane-like, inflexed carina, apices feebly upturned; ventral apical margin between lobes distinctly sinuate centrally, submarginal impression shallow; proctiger somewhat globose in form, apical deflexed portion distinctly conical; parameres (fig. 26) stout, basal arm placed vertically, heads flexed at right angles, placed horizontally, becoming sagittate apically and curved around apices of lateral apical lobes, extreme apices roundly acute; aedeagus (fig. 27) completely sclerotized, black, phallotheca somewhat elongate-globose with pair (1 + 1) of elliptical lobes beneath

apical end, vesica assuming reversed J-shaped configuration with two pairs ($2 + 2$) of stubby spatulate lobes at base.

This species measures 13.0 mm in length; 8.5 mm in width across humeri.

HOLOTYPE. Male, Demerara, British Guiana, February 6, 1915. Deposited in the American Museum of Natural History. Allotype, female. Botanical Gardens (? Georgetown), British Guiana, March, 1907, A. W. Bartlett, collector. Deposited in the British Museum (Natural History). Paratype, male. South America (Amer. mer.), no date, Schmidt, collector; *ex* collection Jensen-Haarup. Deposited in the University Zoological Museum, Copenhagen.

DISTRIBUTION. British Guiana, Demerara; ? Georgetown.

REMARKS. Differs from the preceding by the lack of calloused, flavescent humeri, much finer, denser, more uniform puncturation, differently proportioned pygofer, and aedeagus.

***Patronatus flavicrus* new species**

Figs. 28–30

DIAGNOSIS. Legs uniformly sordid flavescent; punctures fine, dense, irregularly distributed; apical margin of hemelytral membrane in male truncate.

SPECIFIC CHARACTERS. Oval; semiglossy above and beneath; sordid testaceous, punctures piceous, fine, dense, rather unevenly distributed, with numerous extremely fine ferruginous ones interspersed between darker ones on pronotum and scutellum; median line of pronotum continued onto and through most of scutellum.

Head broadly oval, one-sixth longer than wide between eyes; margins feebly reflexed, disc shallowly concave; punctures quite dense, fewest on vertex; eyes globular, dull brown; ocelli sordid topaz, about three times as far apart as distant from eyes. Antenna mutilated, possibly four-segmented since segment II is exceptionally long; segments I, II, and basal half of III black, apical half of III fulvous; segments IV and ? V missing; segmental ratios: 20/70/50/—/?, ie., segment II distinctly compressed, and quite long in comparison with homologous segment in related species.

Pronotum two and one-fourth times as wide as long; anterolateral margins feebly carinate and reflexed, humeral angles obtuse, humeri and disc concolorous; pair ($1 + 1$) of thin, longitudinal pale stripes extending across disc from behind ocelli to posterior angle, about midway between median pale line and anterolateral margins. Scutellum attaining base of terminal abdominal tergite in male, apex rather broad with hint of obtuse angulation; punctures similar to those on pronotum, no particular color design evident, apex with pair of small fuscous patches at margin. Hemelytra irregularly punctured, punctures congested in some places; main vein with parallel, laevigate, flavescent line on its ectal side, disc with erose flavescent spot near end of main vein; free apical margin of corium sinuate, external apical angle acutely rounded; membranes clear, brownish yellow darkening toward base, veins dark brown, raised, slightly arcuate, subparallel; apical margin of membrane in male truncate with conspicuous, semisclerotized fovea-like impression adjacent to external apical angle of corium. Connexivum pale flavescent, punctures ferruginous, anterior half of each segment piceous, apical angles of segments rectilinear, not produced.

Venter sordid flavescent, congestedly punctured laterally, sparingly so medially. Rostrum testaceous reaching sixth abdominal sternite. Legs flavescent without contrastingly colored spots, essentially immaculate, tarsi feebly infuscated. Minute flavescent calloused point adjacent to each pair of trichobothria. Spiracles black with inner lunate margin flavescent.

Pygofer (fig. 28) broadly ovate; dorsal border mildly sinuate over base of proctiger; lateral apical lobes stout, longer than length of capsule, subquadrangular-oblong, dorsal surfaces strongly concave, apical margins somewhat truncate, convergent toward midline, apical angles narrowly rounded; proctiger (dorsal aspect) somewhat pyriform with narrow membranous base, posterior face rotund, convex; ventral apical margin between lobes reflexed, shallowly sinuate with stout, triangular, median tooth; impression beneath margin shallow; parameres stout (fig. 29) hook-shaped, basal arm vertical, head flexed at right angle, somewhat elliptical, ventral surface concave, apical portion overhanging ventral apical margin, attaining apices of lateral apical lobes, inner margin of each head with shallow sinus near middle; aedeagus (fig. 30) black, phallosome globular, with pair (1 + 1) of elliptical lobes produced from posterior dorsal margin, vesica with sigmoid curvature and pair (1 + 1) of irregular appendages near its middle.

This species is 15.5 mm in length; 8.0 mm in width across humeri.

HOLOTYPE. Male, South America, no date. *Ex* Signoret collection. Deposited in the Natural History Museum, Vienna. Paratype, male, El Mene, Venezuela, September 25, 1927. Deposited in the American Museum of Natural History.

REMARKS. Closely related to the preceding species but differs by having immaculate legs, more irregularly distributed puncturation, different shape of paramere, and entirely different pattern of aedeagus.

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